



PATENT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

APPLICANT: D. J. Kempf et al.

PATENT NO.: 5,541,206

ISSUE DATE: July 30, 1996

FOR: RETROVIRAL PROTEASE INHIBITING  
COMPOUNDS

SERIAL NO.: 08/423,387

FILED: April 25, 1995

EXAMINER: J. Fan

CASE NO.: 4681.US.C4

] GROUP ART UNIT: 1203  
] Batch No.: U76  
] I hereby certify that this paper (along with any  
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] Assistant Commissioner for Patents  
] Washington, D.C. 20231  
]  
] Date of Deposit: April 7, 1998  
] *Amy J. Martin* 4-7-98  
] Amy J. Martin Date

REQUEST FOR CERTIFICATE OF CORRECTION

**CERTIFICATE**

Assistant Commissioner for Patents  
Washington, D.C. 20231

APR 14 1998

Dear Sir:

**OF CORRECTION**

Upon review of the final printed copies of the above-identified patent and comparison with the application file, Applicants have identified errors in the patent as printed. Accordingly Applicants request that a Certificate of Correction be issued pursuant to 35 U.S.C. 254 for this patent as set forth on the attached Form PTO 1050, identifying errors by column and line from the patent. Since these errors appear to be due to the fault of the Patent and Trademark Office, no fee is due.

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Telephone: (847)937-9516  
Facsimile: (847) 938-2623

Respectfully submitted,  
D. J. Kempf et al.

*Steven R. Crowley*  
Steven R. Crowley  
Registration No. 31,604  
Agent for Applicants

Staple  
Here  
Only !

PRINTER'S TRIM LINE

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3, line 55, change "AI" to --A1--.

Column 8, line 46, change "4 thiazolyl" to --4-thiazolyl--.

Column 8, line 58, change "valinyl" to -- -valinyl--.

Column 8, line 66, change "valinyl" to -- -valinyl--.

Column 8, line 66, change "methoxycarbonyl)amino" to --thiazolyl)methoxycarbonyl)amino--.

Column 9, line 2, change "amino)carbonyl" to --amino)-carbonyl--.

Column 9, line 3, change "amino-" to --amino)- --.

Column 9, line 6, change "amino)carbonyl)" to --amino)-carbonyl)--.

Column 9, line 7, change "amino)l" to --amino-l--.

Column 9, line 14, change "amino)carbonyl)" to --amino)-carbonyl)--.

Column 9, line 18, change "amino)carbonyl)" to --amino)-carbonyl)--.

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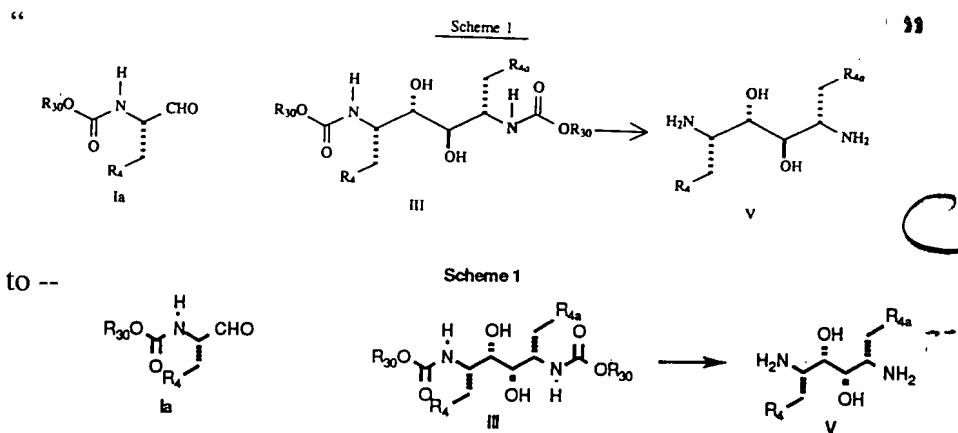


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PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Columns 9 and 10, scheme 1, lines 50-55, change



Columns 13 and 14, scheme 3, line 43, change “NO<sub>2</sub>” to --NH<sub>2</sub>--.

Column 17, line 34, change “(:or” to --(or--.

Column 20, line 42, change “XL. III” to --XLIII--.

Column 26, line 54, change “2.5” to --2,5--.

Column 26, line 55, change “3.4” to --3,4--.

Column 26, line 55, change “1.6” to --1,6--.

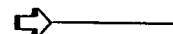
Column 26, line 56, change “2.5” to --2,5--.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

- Column 26, line 56, change "3.4" to --3,4--.
- Column 26, line 57, change "1.6" to --1,6--.
- Column 27, line 53, change "1.6" to --1,6--.
- Column 27, line 64, change "amino)1," to --amino)-1,--.
- Column 28, line 10, change "2.5" to --2,5--.
- Column 28, line 45, change "Thioformamide," to --Thioformamide.--.
- Column 31, line 41, change "1.6" to --1,6--.
- Column 31, line 60, change "1H 7.85" to --1H), 7.85--.
- Column 33, line 6, change "4thiazolyl" to --4-thiazolyl--.
- Column 33, line 27, change "-amino)" to -- amino)--.
- Column 34, lines 29-30, change "thiazolylmethyl" to --thiazolyl)methyl--.
- Column 34, line 31, change "1.6" to --1,6--.
- Column 35, line 2, change "amino-2" to --amino)-2--.
- Column 35, line 3, change "amino)-6" to --amino)-1,6--.
- Column 35, line 15, change "2-1-isopropylthiazole" to --2-Isopropylthiazole--.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 35, line 44, change "1H" to --1H)--. C

Column 36, line 3, change "d)," to --(d,--. C

Column 36, line 8, change ",5-" to --5- --. C

Column 36, line 10, change "1.6" to --1,6--. C

Column 36, line 22, change "1.6" to --1,6--. C

Column 37, line 11, change ",2-" to --2- --. C

Column 37, line 15, change "1867H)." to --1867)--. C

Column 38, lines 5 and 6, delete "-5-(tert-Butyldimethylsilyloxy)" C

Column 38, line 6, change "butyloxycarbonylamino-" to --butyloxycarbonylamino)--. C

Column 38, line 57, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 39, line 36, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 40, line 36, change "(N,N-Dimethylamino)" to --(N-((2-(N,N-Dimethylamino--. C

Column 43, line 13, change "-thiazolyl)" to --4-thiazolyl)--. C

Column 43, lines 21 and 22, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--. C

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 43, line 27, change "amino}" to --amino)--.

Column 43, line 33, change "1.6" to --1,6--.

Column 43, line 63, change "propyl" to --Isopropyl--.

Column 44, line 5, change "N" to --(N--.

Column 44, line 7, change "1.6" to --1,6--.

Column 44, line 9, change "methyl)N-" to --methyl-N- --.

Column 44, line 22, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 47, line 10, change "-4-nitrophenyl)" to ---(4-nitrophenyl)--.

Column 47, line 39, change "(2S,3S,5S}" to --(2S,3S,5S)--.

Column 47, line 40, change "-2," to -- -2- --.

Column 47, line 41, change "1.6" to --1,6--.

Column 47, line 47, change "N(-" to --N- --.

Column 47, line 58, change "(M+NH<sub>4</sub>H)+" to --(M+NH<sub>4</sub>)+-.

Column 48, line <sup>4</sup>8, change "amino)1," to --amino)-1,--.

Column 48, line 25, change "1Hydroxymethyl)" to --(Hydroxymethyl)--.

Column 48, line 41, change "(DMSO-d<sub>6</sub>)" to --(DMSO-d<sub>6</sub>)--.

*note*

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 49, line 32, change "4dimethylaminopyridine" to  
--4-dimethylaminopyridine--.

Column 50, line 4, change "thiazolyl/" to --thiazolyl)--.

Column 50, line 5, change "methylaminocarbonyl)" to --  
methyl)amino)carbonyl)--.

Column 51, line 42, change "1.,6" to --1,6--.

Column 51, line 51, change "1,-Diethoxy" to --1,1-Diethoxy--.

Column 51, line 23, change "(methoxymethyl)thiazole" to  
--(methoxymethyl)-thiazole--.

Column 52, line 28, change "-3hydroxyhexane" to  
-- -3-hydroxyhexane--.

Column 53, line 3, change "2.68;" to --62.68;--.

Column 53, line 8, change "-6-diphenyl" to -- -1,6-diphenyl--.

Column 53, line 11, change "amino--" to --amino-2- --.

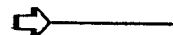
Column 53, line 20, change "(DMSO-d<sub>6</sub>),5" to --(DMSO-d<sub>6</sub>) δ--.

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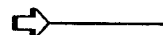
- Column 53, line 37, change "-8-" to --2--.
- Column 54, line 2, change "carbonyl.)" to --carbonyl)--.
- Column 57, line 5, change "-16-diphenyl" to --1,6-diphenyl--.
- Column 57, line 26, change "(2S,3R,4, R,5S)" to --(2S,3R,4R,5S)--.
- Column 58, line 27, change "4,dihydroxy" to --4-dihydroxy--.
- Column 59, line 29, change "1.6" to --1,6--.
- Column 59, line 37, change "(2S,3 8,5S)" to --(2S,3S,5S)--.
- Column 59, line 63, change "5thiazolyl" to --5-thiazolyl--.
- Column 60, line 45, change "-4oxazolyl" to --4-oxazolyl)--.
- Column 60, line 61, change "valinyl)-5-" to --valinyl)amino)-5--.
- Column 61, line 52, change "-4oxazolyl)" to --4-oxazolyl)--.
- Column 61, line 56, change "4thiazolyl)" to --4-thiazolyl)--.
- Column 61, line 64, change "4oxazolyl)" to --4-oxazolyl--.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 61, line 66, change "5isoxazolyl)" to --5-isoxazolyl)--. C

Column 62, line 1, change "4thiazolyl)" to --4-thiazolyl)--. C

Column 62, line 6, change "carbonyl)" to --carbonyl)--. C

Column 62, line 10, change "carbonyl)" to --carbonyl)--. C

Column 62, line 15, change "amino)1" to --amino)-1--. C

Column 62, line 21, change "carbonyl)" to --carbonyl)--. C

Column 62, line 41, change "valinyl)-2-" to --valinyl)amino)-2- ---. C

Column 63, line 1, change "4thiazolyl)" to --4-thiazolyl)--. C

Column 63, line 14, change "carbonyl)" to --carbonyl)--. C

Column 63, line 37, change "amino)" to --amino)--. C

Column 63, line 41, change "carbonyl)" to --carbonyl)--. C

Column 64, line 2, change "carbonyl)" to --carbonyl)--. C

Column 64, line 6, change "amino)" to --amino)--. C

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Column 64, line 14, change "4thiazolyl)" to --4-thiazolyl)--. C  
Column 64, line 18, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 21, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 24, change "amino)" to -- -amino)--. C  
Column 64, line 29, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 33, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 37, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 41, change "carbonyl)" to -- -carbonyl)--. C  
Column 64, line 49, change "methyl)" to -- -methyl)--. C  
Column 64, line 53, change "amino)" to -- -amino)--. C  
Column 65, line 10, change "methyl)" to -- -methyl)--. C  
Column 65, line 25, change "carbonyl)" to -- -carbonyl)--. C  
Column 65, line 42, change "amino)1," to --amino)-1,--. C

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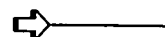
Column 66, line 14, change "carbonyl)" to -- -carbonyl)--. C  
Column 66, line 29, change "carbonyl)" to -- -carbonyl)--. C  
Column 66, line 33, change "carbonyl)" to -- -carbonyl)--. C  
Column 66, line 37, change "amino)" to -- -amino)--. C  
Column 66, line 41, change "carbonyl)" to -- -carbonyl)--. C  
Column 66, line 65, change "amino)" to -- -amino)--. C  
Column 67, line 57, change "amino)" to -- -amino)--. C  
Column 67, line 61, change "amino)" to -- -amino)--. C  
Column 68, line 2, change "amino)" to -- -amino)--. C  
Column 68, line 10, change "carbonyl)" to -- -carbonyl)--. C  
Column 68, line 32, change "amino)" to -- -amino)--. C  
Column 70, line 41, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--. C

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DATED : July 30, 1996  
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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 71, line 28, change "(isopropylthiazole" to  
--isopropylthiazole--.

Column 71, line 35, change "methyl)" to -- -methyl)--.

Column 71, line 40, change "(2" to --((2--.

Column 71, line 41, change "amino/" to --amino)--.

Column 72, line 2, change "CHCl<sub>3</sub>H)." to --CHCl<sub>3</sub>).--.

Column 72, line 4, change "diphenyl,3" to --diphenyl-3--.

Column 72, line 11, change "CHCl<sub>3</sub>H)." to --CHCl<sub>3</sub>).--.

Column 72, line 16, change "-N," to -- -N- --.

Column 72, line 53, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 72, line 60, change "methyl)" to -- -methyl)--.

Column 72, line 63, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 73, line 29, change "Hydroxyethyl-" to --Hydroxyethyl)--.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 73, line 35, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 73, line 50, change "N,((2,-" to --N-((2- --. C

Column 73, line 51, change "thiazolyl-" to --thiazolyl)--. C

Column 73, line 55, change "ethoxy-" to --ethoxy)--. C

Column 73, line 65, change "ethoxy-" to --ethoxy)--. C > style

Column 74, line 3, change "ethoxy-" to --ethoxy)--. C

Column 74, line 52, change "G." to --C.--. C

Column 74, line 56, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 74, line 59, change "Isopropyl," to --Isopropyl- --. C

note Column 75, line 18, change "cyclopropyl" to --cyclopropyl--. C

Column 76, line 2, change "isopropylthiazole" to --2-isopropylthiazole--. C

Column 76, line 21, change "N," to --N- --. C

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 76, line 23, change "diphenyl," to --diphenyl- --. C

Column 76, line 42, change "H" to --<sup>1</sup>H--. C

Column 76, line 42, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 76, line 49, change "Ethyl-" to --Ethyl-4- --. C

Column 76, line 50, change "(chloromethyl)" to --(chloromethyl)-2- --. C

Column 77, line 19, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 77, line 27, change "methyl" to -- -methyl-. C

Column 77, line 42, change "amino)-6" to --amino)-1,6--. C

Column 77, line 52, change "H<sub>2</sub>" to --H<sub>2</sub>O--. C

Column 77, line 67, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--. C

Column 78, line 33, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--. C

Column 78, line 41, change "N," to --N- --. C

Column 80, line 19, change "thiazole" to -- -thiazole-. C

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Column 80, line 59, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 81, line 3, change "[ (2-" to --((2- --.

*modify* Column 81, line 44, change <sup>1H NMR</sup> "(CDCl<sub>3</sub>H)" to <sup>11H NMR</sup> --(CDCl<sub>3</sub>)--.

Column 82, line 19, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 82, line 30, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 82, line 40, change "Butyloxycarbonyl)amino)" to --Butyloxycarbonylamino)--.

Column 83, line 6, change "{N" to --(N--.

Column 83, line 32, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 83, line 44, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 83, line 45, change "1,65" to --1.65--.

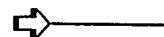
Column 83, line 59, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

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Column 83, line 64, change "2," to --2- --.

Column 84, line 10, change "CH<sub>2</sub>Cl<sub>2</sub>H)." to --CH<sub>2</sub>Cl<sub>2</sub>).--.

Column 84, line 11, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 84, line 34, change "CDCl<sub>3</sub>H)" to --CDCl<sub>3</sub>)--.

Column 84, line 37, change "CDCl<sub>3</sub>H)" to --CDCl<sub>3</sub>)--.

Column 85, line 2, change "(CHCl<sub>3</sub>H)" to --(CHCl<sub>3</sub>)--.

Column 85, line 3, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 85, line 7, change "CDCl<sub>3</sub>H)" to --CDCl<sub>3</sub>)--.

Column 85, line 19, change "51,6" to --51.6--.

Column 85, line 31, change "(dibenzylamino)" to --dibenzylamino)--.

Column 85, line 49, change "CDCl<sub>3</sub>H)" to --CDCl<sub>3</sub>)--.

Column 85, line 63, change "41,6" to --41.6--.

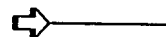
Column 87, line 2, change "51,6" to --51.6--.

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PATENT NO. 5,541,206

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 87, line 15, change "21,6" to --21.6--.

Column 87, line 35, change "(2S,8S,5S)" to --(2S,3S,5S)--.

Column 88, line 23, change "183.7°" to --183.7°--.

Column 88, line 23, change "CDCl<sub>3</sub>,δH):" to --CDCl<sub>3</sub>,δ):--.

Column 88, line 23, change "11,68" to --11.68--.

Column 88, line 30, change "4oxo" to --4-oxo--.

Column 88, line 31, change "1," to --1--.

Column 88, line 47, change "hydroxyl" to --hydroxy--.

Column 88, line 63, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 11, change "(1/1H)" to --(1/1)--.

Column 89, line 12, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 34, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 35, change "concentrated/n" to --concentrated in--.

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 90, line 15, change "(M+18H)<sup>+</sup>" to --(M+18)<sup>+</sup>--.

Column 90, line 40, change "Methyl)-N-" to --Methyl-N--.

Column 92, line 32, change "NaHCO<sub>3</sub>H)." to --NaHCO<sub>3</sub>--.

Column 92, line 34, change " $\leq 45^\circ$ " to -- $\leq 45^\circ$ --.

Column 93, line 12, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 93, line 34, change "(aqueous pH+7H)" to --(aqueous pH<sub>7</sub>)--.

Column 93, line 35, change " $\leq 45^\circ$ " to -- $\leq 45^\circ$ --.

Column 93, line 41, change "NH<sub>2</sub>H)" to --NH<sub>2</sub>--.

Column 93, line 67, change "61,6" to --61.6--.

Column 95, line 4, change "121,6," to --121.6--.

Column 95, line 63, change "amino/" to --amino)--.

Column 96, line 65, change "Gin" to --Gln--.

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PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 99, line 12, change "(R<sub>b</sub>H)(R<sub>d</sub>H)" to --(R<sub>b</sub>)(R<sub>d</sub>)--.

Column 99, line 13, change "(R<sub>b</sub>H)(R<sub>d</sub>H)" to --(R<sub>b</sub>)(R<sub>d</sub>)--.

Column 99, line 15, change "-N-(R<sub>e</sub>H)(R<sub>f</sub>H)," to ---N(R<sub>e</sub>)(R<sub>f</sub>),--.

Column 99, line 18, change "(CH<sub>2</sub>H)" to --(CH<sub>2</sub>)--.

Column 99, line 19, change "(CH<sub>2</sub>H)<sub>2</sub>OCH" to --(CH<sub>2</sub>)<sub>2</sub>OCH--.

Column 99, line 34, change "(R<sub>g</sub>H)" to --(R<sub>g</sub>)--.

Column 99, lines 34 and 35, change "(R<sub>g</sub>H)" to --(R<sub>g</sub>)--.

Column 99, line 40, change "2363H" to --2363)--.

Column 101, line 9, change "(1976H)" to --(1976)--.

Column 101, line 13, change "(1H)" to --(1)--.

Column 101, line 15, change "(2H)" to --(2)--.

Column 101, line 54, change "AU721," to --AL-721,--.

Column 101, line 61, change "R<sub>82193</sub>," to --R82193,--.

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PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 101, line 64, change " $R_{82150}$ ," to --R82150,--.

Column 102, line 25, change "(gp120H)" to --(gp120)--.

Column 102, line 25, change "(gp120H)" to --(gp120)--.

Column 102, line 26, change "(gp160H)" to --(gp160)--.

Column 102, line 26, change "(gp160H)" to --(gp160)--.

Column 102, line 27, change "(p24H)" to --(p24)--.

Column 105, line 32, change "-N-( $R_8$ )-" to --N( $R_8$ )--.

Column 105, lines 48 and 49, change "(N-methoxycarbonyl)" to --(N-((5-thiazolyl)methoxycarbonyl))--.

Column 105, line 50, change "Isopropyl)-4" to --Isopropyl-4--.

Column 106, line 49, change "-CH<sub>2</sub>-Nor-( $R_8$ )-" to ---CH<sub>2</sub> or -N( $R_8$ )---.

Column 107, line 54, change "NHR<sub>8a</sub>" to --NHR<sub>8a</sub>--.

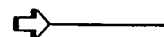
Column 108, line 12, change "3hydroxyhexane;" to --3-hydroxyhexane--.

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PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 108, line 17, change "4-(cyclopentenyl)" to  
--4-cyclopentenyl--.

Column 108, between lines 25 and 26 , insert --(2S,3S,5S)-5-(N-(N-  
(N-Methyl-N-((2-(3-propenyl)-4-thiazolyl)methyl)amino)-  
carbonyl)valinyl)amino)-2-(N-((5-thiazolyl)methoxycarbonyl)amino-  
1,6-diphenyl-3-hydroxyhexane;--.

Column 108, line 35, change "1-methyl-2" to --2-methyl-1--.

Column 108, line 42, change "3hydroxyhexane;" to  
--3-hydroxyhexane;--.

Column 108, lines 43 and 44, change "(1,2-(cyclopentyl)" to  
--(cyclopentyl)--.

Column 108, line 64, change "(2-(4-fluoro)" to --(4-fluoro)--.

Column 109, line 5, change "(2-methoxy)" to --(3-methoxy)--.

Column 109, line 29, change "2-(methyl)" to --(2-methyl)--.

Column 109, line 36, change "3hydroxyhexane;" to  
--3-hydroxyhexane;--.

Column 109, line 46, change "N-Methyl" to --N-Ethyl--.

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# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 110, line 44, change "(N,N-" to --(N-(N- --. C

Column 110, line 48, change "(N,N-" to --(N-(N- --. C

Column 111, line 1, change "(N,N-" to --(N-(N- --. C

Column 111, line 9, change "(N,N-" to --(N-(N- --. C

Column 111, line 13, change "(N,N-" to --(N-(N- --. C

Column 111, line 18, change "(N,N-" to --(N-(N- --. C

Column 111, line 22, change "(N,N-" to --(N-(N- --. C

Column 112, line 9, change "(N,N-" to --(N-(N- --. C

Column 112, line 13, change "(N,N-" to --(N-(N- --. C

Column 112, lines 39 and 40, change "methyl)" to -- -4-thiazolyl)methyl)--. C

Column 113, line 24, change "-2(N-" to -- -2-(N- --. C

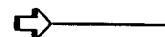
Column 113, line 63, change "(N,N-" to --(N-(N- --. C

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PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 114, line 13, change "(N,N-" to --(N-(N- --. C

Column 114, line 30, change "(N,N-" to --(N-(N- --. C

Column 114, line 35, change "-5-(N-" to -- -5-(N-(N- --. C

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 1 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 3, line 55, change "AI" to --A1--.

Column 8, line 46, change "4 thiazolyl" to --4-thiazolyl--.

Column 8, line 58, change "valinyl" to -- -valinyl--.

Column 8, line 66, change "valinyl" to -- -valinyl--.

Column 8, line 66, change "methoxycarbonyl)amino" to  
--thiazolyl)methoxycarbonyl)amino--.

Column 9, line 2, change "amino)carbonyl" to --amino)-carbonyl--.

Column 9, line 3, change "amino-" to --amino)- --.

Column 9, line 6, change "amino)carbonyl)" to --amino)-carbonyl)--.

Column 9, line 7, change "amino)l" to --amino-l--.

Column 9, line 14, change "amino)carbonyl)" to --amino)-carbonyl)--.

Column 9, line 18, change "amino)carbonyl)" to --amino)-carbonyl)--.

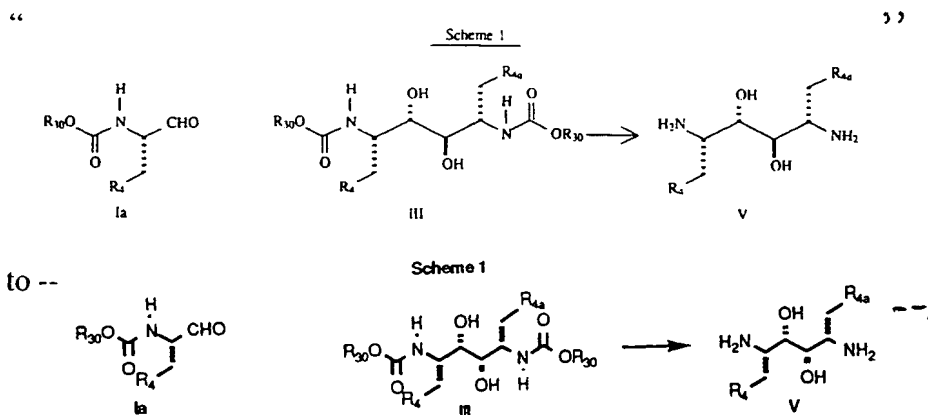
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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
 DATED : July 30, 1996  
 INVENTOR(S) : Kempf et al.

Page 2 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Columns 9 and 10, scheme 1, lines 50-55, change



Columns 13 and 14, scheme 3, line 43, change “NO<sub>2</sub>” to --NH<sub>2</sub>--.

Column 17, line 34, change “(:or” to --(or--.

Column 20, line 42, change “XL. III” to --XLIII--.

Column 26, line 54, change “2.5” to --2,5--.

Column 26, line 55, change “3.4” to --3,4--.

Column 26, line 55, change “1.6” to --1,6--.

Column 26, line 56, change “2.5” to --2,5--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206 Page 3 of 22  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 26, line 56, change "3.4" to --3,4--.

Column 26, line 57, change "1.6" to --1,6--.

Column 27, line 53, change "1.6" to --1,6--.

Column 27, line 64, change "amino)1," to --amino)-1,--.

Column 28, line 10, change "2.5" to --2,5--.

Column 28, line 45, change "Thioformamide," to --Thioformamide.--.

Column 31, line 41, change "1.6" to --1,6--.

Column 31, line 60, change "1H 7.85" to --1H), 7.85--.

Column 33, line 6, change "4thiazolyl" to --4-thiazolyl--.

Column 33, line 27, change "-amino)" to -- amino)--.

Column 34, lines 29-30, change "thiazolylmethyl" to --thiazolyl)methyl--.

Column 34, line 31, change "1.6" to --1,6--.

Column 35, line 2, change "amino-2" to --amino)-2--.

Column 35, line 3, change "amino)-6" to --amino)-1,6--.

Column 35, line 15, change "2-1-isopropylthiazole" to  
--2-Isopropylthiazole--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206 Page 4 of 22  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 35, line 44, change "1H" to --1H)--.

Column 36, line 3, change "d)," to --(d,--.

Column 36, line 8, change ",5-" to -- -5- --.

Column 36, line 10, change "1.6" to --1,6--.

Column 36, line 22, change "1.6" to --1,6--.

Column 37, line 11, change ",2-" to -- -2- --.

Column 37, line 15, change "1867H)." to --1867)--.

Column 38, lines 5 and 6, delete "-5-(tert-Butyldimethylsilyloxy)"

Column 38, line 6, change "butyloxycarbonylamino-" to  
--butyloxycarbonylamino)- --.

Column 38, line 57, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 39, line 36, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 40, line 36, change "(N,N-Dimethylamino)" to --(N-((2-(N,N-Dimethylamino--.

Column 43, line 13, change "-thiazolyl)" to -- -4-thiazolyl)--.

Column 43, lines 21 and 22, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206 Page 5 of 22  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 43, line 27, change "amino}" to --amino)--.

Column 43, line 33, change "1.6" to --1,6--.

Column 43, line 63, change "propyl" to --Isopropyl--.

Column 44, line 5, change "N" to --(N--.

Column 44, line 7, change "1.6" to --1,6--.

Column 44, line 9, change "methyl)N-" to --methyl-N- --.

Column 44, line 22, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 47, line 10, change "-4-nitrophenyl)" to -- -(4-nitrophenyl)--.

Column 47, line 39, change "(2S,3S,5S}" to --(2S,3S,5S)--.

Column 47, line 40, change "-2," to -- -2- --.

Column 47, line 41, change "1.6" to --1,6--.

Column 47, line 47, change "N(-" to --N- --.

Column 47, line 58, change "(M+NH<sub>4</sub>H)+" to --(M+NH<sub>4</sub>)++.

Column 48, line 4, change "amino)1," to --amino)-1,--.

Column 48, line 25, change "1Hydroxymethyl)" to --(Hydroxymethyl)--.

Column 48, line 41, change "(DMSO-d<sub>6</sub>)" to --(DMSO-d<sub>6</sub>)--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 49, line 32, change "4dimethylaminopyridine" to --4-dimethylaminopyridine--.

Column 50, line 4, change "thiazolyl/" to --thiazolyl)--.

Column 50, line 5, change "methylaminocarbonyl)" to --methyl)amino)carbonyl)--.

Column 51, line 42, change "1.,6" to --1,6--.

Column 51, line 51, change "1,-Diethoxy" to --1,1-Diethoxy--.

Column 51, line 23, change "(methoxymethyl)thiazole" to --(methoxymethyl)-thiazole--.

Column 52, line 28, change "-3hydroxyhexane" to -- -3-hydroxyhexane--.

Column 53, line 3, change "2.68;" to --62.68;--.

Column 53, line 8, change "-6-diphenyl" to -- -1,6-diphenyl--.

Column 53, line 11, change "amino--" to --amino-2- --.

Column 53, line 20, change "(DMSO-d<sub>6</sub>),5" to --(DMSO-d<sub>6</sub>) δ--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 7 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 53, line 37, change "-8-" to -- -2- --.

Column 54, line 2, change "carbonyl.)" to --carbonyl)--.

Column 57, line 5, change "-16-diphenyl" to --1,6-diphenyl--.

Column 57, line 26, change "(2S,3R,4, R,5S)" to --(2S,3R,4R,5S)--.

Column 58, line 27, change "4,dihydroxy" to --4-dihydroxy--.

Column 59, line 29, change "1.6" to --1,6--.

Column 59, line 37, change "(2S,3 8,5S)" to --(2S,3S,5S)--.

Column 59, line 63, change "5thiazolyl" to --5-thiazolyl--.

Column 60, line 45, change "-4oxazolyl" to -- -4-oxazolyl)--.

Column 60, line 61, change "valinyl)-5-" to --valinyl)amino)-5- --.

Column 61, line 52, change "-4oxazolyl)" to -- -4-oxazolyl)--.

Column 61, line 56, change "4thiazolyl)" to --4-thiazolyl)--.

Column 61, line 64, change "4oxazolyl)" to --4-oxazolyl--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 8 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 61, line 66, change "5isoxazolyl)" to --5-isoxazolyl)--.

Column 62, line 1, change "4thiazolyl)" to --4-thiazolyl)--.

Column 62, line 6, change "carbonyl)" to -- -carbonyl)--.

Column 62, line 10, change "carbonyl)" to -- -carbonyl)--.

Column 62, line 15, change "amino)1" to --amino)-1--.

Column 62, line 21, change "carbonyl)" to -- -carbonyl)--.

Column 62, line 41, change "valinyl)-2-" to --valinyl)amino)-2- --.

Column 63, line 1, change "4thiazolyl)" to --4-thiazolyl)--.

Column 63, line 14, change "carbonyl)" to -- -carbonyl)--.

Column 63, line 37, change "amino)" to -- -amino)--.

Column 63, line 41, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 2, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 6, change "amino)" to -- -amino)--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 9 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 64, line 14, change "4thiazolyl)" to --4-thiazolyl)--.

Column 64, line 18, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 21, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 24, change "amino)" to -- -amino)--.

Column 64, line 29, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 33, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 37, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 41, change "carbonyl)" to -- -carbonyl)--.

Column 64, line 49, change "methyl)" to -- -methyl)--.

Column 64, line 53, change "amino)" to -- -amino)--.

Column 65, line 10, change "methyl)" to -- -methyl)--.

Column 65, line 25, change "carbonyl)" to -- -carbonyl)--.

Column 65, line 42, change "amino)1," to --amino)-1,--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 10 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 66, line 14, change "carbonyl)" to -- -carbonyl)--.

Column 66, line 29, change "carbonyl)" to -- -carbonyl)--.

Column 66, line 33, change "carbonyl)" to -- -carbonyl)--.

Column 66, line 37, change "amino)" to -- -amino)--.

Column 66, line 41, change "carbonyl)" to -- -carbonyl)--.

Column 66, line 65, change "amino)" to -- -amino)--.

Column 67, line 57, change "amino)" to -- -amino)--.

Column 67, line 61, change "amino)" to -- -amino)--.

Column 68, line 2, change "amino)" to -- -amino)--.

Column 68, line 10, change "carbonyl)" to -- -carbonyl)--.

Column 68, line 32, change "amino)" to -- -amino)--.

Column 70, line 41, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

Page 11 of 22

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 71, line 28, change "(isopropylthiazole" to --isopropylthiazole--.

Column 71, line 35, change "methyl)" to -- -methyl)--.

Column 71, line 40, change "(2" to --((2--.

Column 71, line 41, change "amino/" to --amino)--.

Column 72, line 2, change "CHCl<sub>3</sub>H)." to --CHCl<sub>3</sub>).--.

Column 72, line 4, change "diphenyl,3" to --diphenyl-3--.

Column 72, line 11, change "CHCl<sub>3</sub>H)." to --CHCl<sub>3</sub>).--.

Column 72, line 16, change "-N," to -- -N- --.

Column 72, line 53, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 72, line 60, change "methyl)" to -- -methyl)--.

Column 72, line 63, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 73, line 29, change "Hydroxyethyl-" to --Hydroxyethyl)- --.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 73, line 35, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 73, line 50, change "N,((2,-" to --N-((2- --.

Column 74, line 3, change "ethoxy-)" to --ethoxy)--.

Column 74, line 52, change "G." to --C.--.

Column 74, line 56, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 74, line 59, change "Isopropyl," to --Isopropyl- --.

Column 75, line 18, change "(Cyclopropyl" to --Cyclopropyl--.

Column 76, line 2, change "isopropylthiazole" to  
--2-isopropylthiazole--.

Column 76, line 21, change "N," to --N- --.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 76, line 23, change "diphenyl," to --diphenyl- --.

Column 76, line 42, change "H" to --<sup>1</sup>H--.

Column 76, line 42, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 76, line 49, change "Ethyl-" to --Ethyl-4- --.

Column 76, line 50, change "(chloromethyl)" to --(chloromethyl)-2- --.

Column 77, line 19, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 77, line 27, change "methyl" to -- -methyl--.

Column 77, line 42, change "amino)-6" to --amino)-1,6--.

Column 77, line 52, change "H<sub>2</sub>" to --H<sub>2</sub>O--.

Column 77, line 67, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 78, line 33, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 78, line 41, change "N," to --N- --.

Column 80, line 19, change "thiazole" to -- -thiazole--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : July 30, 1996  
DATED : Kempf et al.  
INVENTOR(S) :

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 80, line 59, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 81, line 3, change "[ (2-" to --((2- --.

Column 81, line 44, change "<sup>1</sup>H NMR (CDCl<sub>3</sub>H)" to <sup>1</sup>H NMR (CDCl<sub>3</sub>)

Column 82, line 19, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 82, line 30, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 82, line 40, change "Butyloxycarbonylamino)" to --Butyloxycarbonylamino)--.

Column 83, line 6, change "{N" to --(N--.

Column 83, line 32, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 83, line 44, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

Column 83, line 45, change "1,65" to --1.65--.

Column 83, line 59, change "(CDCl<sub>3</sub>H)" to --(CDCl<sub>3</sub>)--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 83, line 64, change "2," to --2- --.

Column 84, line 10, change " $\text{CH}_2\text{Cl}_2\text{H}$ ." to -- $\text{CH}_2\text{Cl}_2$ ).--.

Column 84, line 11, change " $(\text{DMSO}-d_6\text{H})$ " to -- $(\text{DMSO}-d_6)$ --.

Column 84, line 34, change " $\text{CDCl}_3\text{H}$ " to -- $\text{CDCl}_3$ --.

Column 84, line 37, change " $\text{CDCl}_3\text{H}$ " to -- $\text{CDCl}_3$ --.

Column 85, line 2, change " $(\text{CHCl}_3\text{H})$ " to -- $(\text{CHCl}_3)$ --.

Column 85, line 3, change " $(\text{CDCl}_3\text{H})$ " to -- $(\text{CDCl}_3)$ --.

Column 85, line 7, change " $\text{CDCl}_3\text{H}$ " to -- $\text{CDCl}_3$ --.

Column 85, line 19, change "51,6" to --51.6--.

Column 85, line 31, change "(dibenzylamino)" to --dibenzylamino)--.

Column 85, line 49, change " $\text{CDCl}_3\text{H}$ " to -- $\text{CDCl}_3$ --.

Column 85, line 63, change "41,6" to --41.6--.

Column 87, line 2, change "51,6" to --51.6--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 87, line 15, change "21,6" to --21.6--.

Column 87, line 35, change "(2S,8S,5S)" to --(2S,3S,5S)--.

Column 88, line 23, change "183.7°" to --183.7°--.

Column 88, line 23, change "CDCl<sub>3</sub>,δH):" to --CDCl<sub>3</sub>,δ):--.

Column 88, line 23, change "11,68" to --11.68--.

Column 88, line 30, change "4oxo" to --4-oxo--.

Column 88, line 31, change "1," to --1--.

Column 88, line 47, change "hydroxyl" to --hydroxy--.

Column 88, line 63, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 11, change "(1/1H)" to --(1/1)--.

Column 89, line 12, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 34, change "(Na<sub>2</sub>SO<sub>4</sub>H)" to --(Na<sub>2</sub>SO<sub>4</sub>)--.

Column 89, line 35, change "concentrated/n" to --concentrated in--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 90, line 15, change "(M+18H)<sup>+</sup>" to --(M+18)<sup>+</sup>--.

Column 90, line 40, change "Methyl)-N-" to --Methyl-N- --.

Column 92, line 32, change "NaHCO<sub>3</sub>H)." to --NaHCO<sub>3</sub>).--.

Column 93, line 12, change "(DMSO-d<sub>6</sub>H)" to --(DMSO-d<sub>6</sub>)--.

Column 93, line 34, change "(aqueous pH+7H)" ,  
--(aqueous pH=7)--.

Column 93, line 41, change "NH<sub>2</sub>H)" to --NH<sub>2</sub>)--.

Column 93, line 67, change "61,6" to --61.6--.

Column 95, line 4, change "121,6," to --121.6,--.

Column 95, line 63, change "amino/" to --amino)--.

Column 96, line 65, change "Gin" to --Gln--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 99, line 12, change "(R<sub>b</sub>H)(R<sub>d</sub>H)" to --(R<sub>b</sub>)(R<sub>d</sub>)--.

Column 99, line 13, change "(R<sub>b</sub>H)(R<sub>d</sub>H)" to --(R<sub>b</sub>)(R<sub>d</sub>)--.

Column 99, line 15, change "-N-(R<sub>c</sub>H)(R<sub>f</sub>H)," to ---N(R<sub>c</sub>)(R<sub>f</sub>),--.

Column 99, line 18, change "(CH<sub>2</sub>H)" to --(CH<sub>2</sub>)--.

Column 99, line 19, change "(CH<sub>2</sub>H)<sub>2</sub>OCH" to --(CH<sub>2</sub>)<sub>2</sub>OCH--.

Column 99, line 34, change "(R<sub>g</sub>H)" to --(R<sub>g</sub>)--.

Column 99, lines 34 and 35, change "(R<sub>g</sub>H)" to --(R<sub>g</sub>)--.

Column 99, line 40, change "2363H)" to --2363)--.

Column 101, line 9, change "(1976H)" to --(1976)--.

Column 101, line 13, change "(1H)" to --(1)--.

Column 101, line 15, change "(2H)" to --(2)--.

Column 101, line 54, change "AU721," to --AL-721,--.

Column 101, line 61, change "R<sub>82193</sub>," to --R82193,--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 101, line 64, change " $R_{82150}$ ," to --R82150,--.

Column 102, line 25, change "(gp120H)" to --(gp120)--.

Column 102, line 25, change "(gp120H)" to --(gp120)--.

Column 102, line 26, change "(gp160H)" to --(gp160)--.

Column 102, line 26, change "(gp160H)" to --(gp160)--.

Column 102, line 27, change "(p24H)" to --(p24)--.

Column 105, line 32, change "-N-( $R_8$ )-" to --N( $R_8$ )- --.

Column 105, lines 48 and 49, change "(N-methoxycarbonyl)" to --(N-((5-thiazolyl)methoxycarbonyl))--.

Column 105, line 50, change "Isopropyl)-4" to --Isopropyl-4--.

Column 106, line 49, change "-CH<sub>2</sub>-Nor-( $R_8$ )-" to ---CH<sub>2</sub> or -N( $R_8$ )---.

Column 107, line 54, change "NHR<sub>8a</sub>" to --NHR<sub>8a</sub>--.

Column 108, line 12, change "3hydroxyhexane;" to --3-hydroxyhexane--.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 108, line 17, change "4-(cyclopentenyl)" to  
--4-cyclopentenyl--.

Column 108, between lines 25 and 26 , insert --(2S,3S,5S)-5-(N-(N-  
((N-Methyl-N-((2-(3-propenyl)-4-thiazolyl)methyl)amino)-  
carbonyl)valinyl)amino)-2-(N-((5-thiazolyl)methoxycarbonyl)amino-  
1,6-diphenyl-3-hydroxyhexane;--.

Column 108, line 35, change "1-methyl-2" to --2-methyl-1--.

Column 108, line 42, change "3hydroxyhexane;" to  
--3-hydroxyhexane;--.

Column 108, lines 43 and 44, change "(1,2-(cyclopentyl)" to  
--(cyclopentyl)--.

Column 108, line 64, change "(2-(4-fluoro)" to --(4-fluoro)--.

Column 109, line 5, change "(2-methoxy)" to --(3-methoxy)--.

Column 109, line 29, change "2-(methyl)" to --(2-methyl)--.

Column 109, line 36, change "3hydroxyhexane;" to  
--3-hydroxyhexane;--.

Column 109, line 46, change "N-Methyl" to --N-Ethyl--.

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**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 110, line 44, change "(N,N-" to --(N-(N- --.

Column 110, line 48, change "(N,N-" to --(N-(N- --.

Column 111, line 1, change "(N,N-" to --(N-(N- --.

Column 111, line 9, change "(N,N-" to --(N-(N- --.

Column 111, line 13, change "(N,N-" to --(N-(N- --.

Column 111, line 18, change "(N,N-" to --(N-(N- --.

Column 111, line 22, change "(N,N-" to --(N-(N- --.

Column 112, line 9, change "(N,N-" to --(N-(N- --.

Column 112, line 13, change "(N,N-" to --(N-(N- --.

Column 112, lines 39 and 40, change "methyl)" to -- -4-thiazolyl)methyl)--.

Column 113, line 24, change "-2(N-" to -- -2-(N- --.

Column 113, line 63, change "(N,N-" to --(N-(N- --.

UNITED STATES PATENT AND TRADEMARK OFFICE  
**CERTIFICATE OF CORRECTION**

PATENT NO. : 5,541,206  
DATED : July 30, 1996  
INVENTOR(S) : Kempf et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 114, line 13, change "(N,N-" to --(N-(N- --.

Column 114, line 30, change "(N,N-" to --(N-(N- --.

Column 114, line 35, change "-5-(N-" to -- -5-(N-(N- --.

Signed and Sealed this  
Twenty-first Day of July, 1998



Attest:

BRUCE LEHMAN

Attesting Officer

Commissioner of Patents and Trademarks